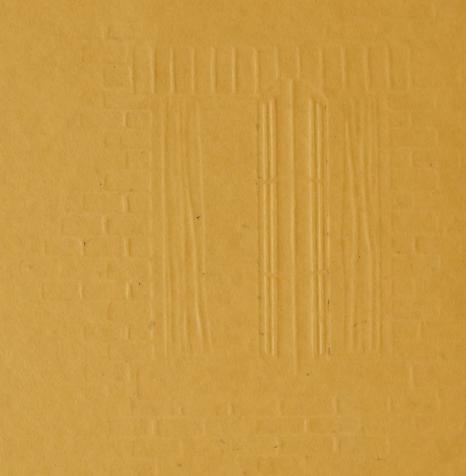


HOFFMAN CASEMENTS



HOFFINANTS HOFFINANTS

HIS portfolio of details is prepared in conformity with the dations of the A. I. A. Its Standard Construction Classification number is 27C2. Additional details made to fit this folder will be issued as often as found necessarv.

Material Furnished: We manufacture the hardware only. Sash and frames are obtained in the regular way from local planing mills and made according to the details shown herein. One set of fixtures includes all the necesary hardware to completely hang and equip one pair or one single sash.

Grades of Hardware: Hoffman Casement Fixtures (U.S. and Foreign patents) are manufactured in four grades, described below. Stock finishes are: Polished Brass; Polished Bronze; Dull Brass; Oxidized Copper. Other finishes furnished to order at extra cost.

No. 1.—Galvanized tracks, galvanized top hangers with brass wheels, galvanized bottom guides with brass swivel pins, plated iron butts, fasteners and handles. Stay arms for single sash, galvanized.

No. 2.—Same as No. 1 excepting butts, fasteners and handles which are solid brass, tumbled finish (not hand polished) and then plated to finish color desired.

No. 3.—Same as No. 2 excepting that sill track is solid brass and butts, fasteners and handles are solid brass, polished.

No. 4.—All parts solid brass.

Prices and Distribution: Uniform selling prices (F.O.B. Chicago) are established and distribution is thru our agents located in all large cities.

Shipping Information: Hoffman Casement Fixtures packed for shipment weigh approximately 100 lbs. per twelve sets. Each set of hardware (except tracks) is packed in a pasteboard carton. Track for similar sized windows is bundled and marked with the size of the window for

which it is intended. Goods in stock finishes are usually shipped the day after order is received. No delay longer than three days may be anticipated unless a special finish is ordered which requires from a week to ten days for plating.

Sash Sizes: The maximum size of each sash for use with Hoffman Casement Fixtures is 2'6" x 7'0" and larger sash will be used only on the user's responsibility. We recommend sash not in excess of 2'0" x 5'0" for the most satisfactory results. Sash in pairs may be 13/8", 13/4" or 21/4" thick. Where single sash are used they should be 13/4" or 21/4" thick.

Frames: Hoffman Casements are movable from jamb to jamb and frames should be set carefully to insure their being level and square. The fixtures carry the weight of the sash from the head, so in long spans the head must be supported to prevent sagging (suggested methods are on page 14). We recommend that no span greater than four feet be used without intermediate support. It is suggested that architects mention these two points particularly in specifications.

Changes from Details: No agent or representitive has authority to make any changes from the details in this portfolio and we can guarantee satisfactory results only when our printed details and directions are followed.

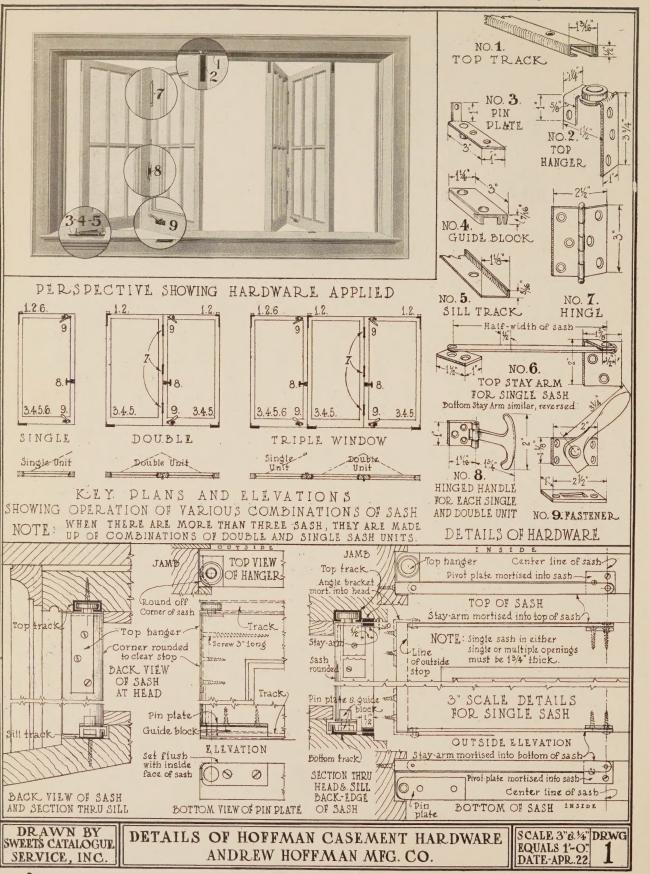
Specification Form: All window frames and sash shall be milled according to details and the contractor shall exercise particular care to set the frames perfectly level and square and shall bolt the head to the lintel at intervals not exceeding 4'0" wherever the span is greater than The sash shall be hung with Hoffman Casement Fixtures (here insert grade number) as manufactured by the Andrew Hoffman Mfg. Co., 909 Steger Building, Chicago, in exact accordance with details and directions furnished by the manufacturers.

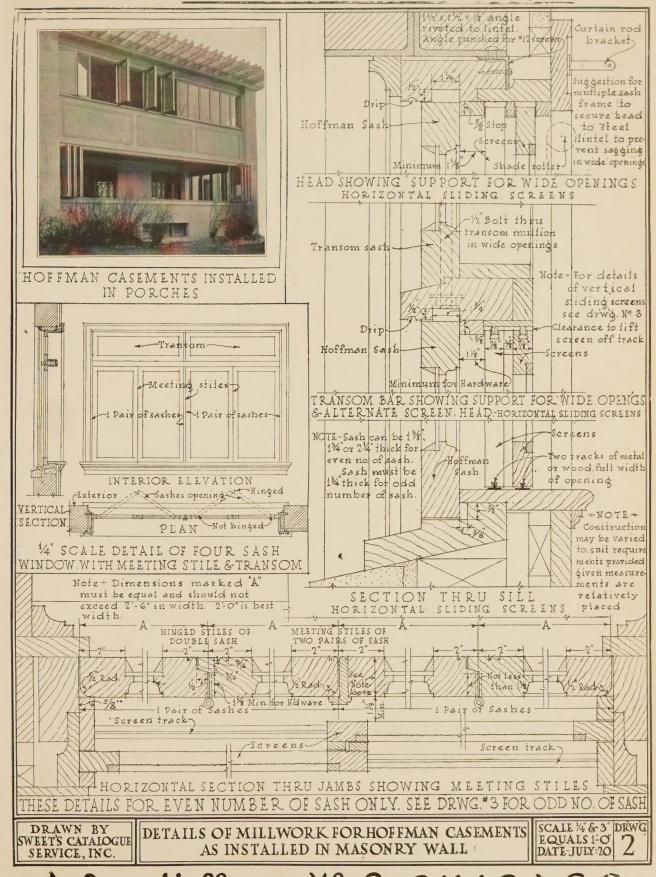
Andrew Hoffman Mfg. Co. Hoffman Casement Window

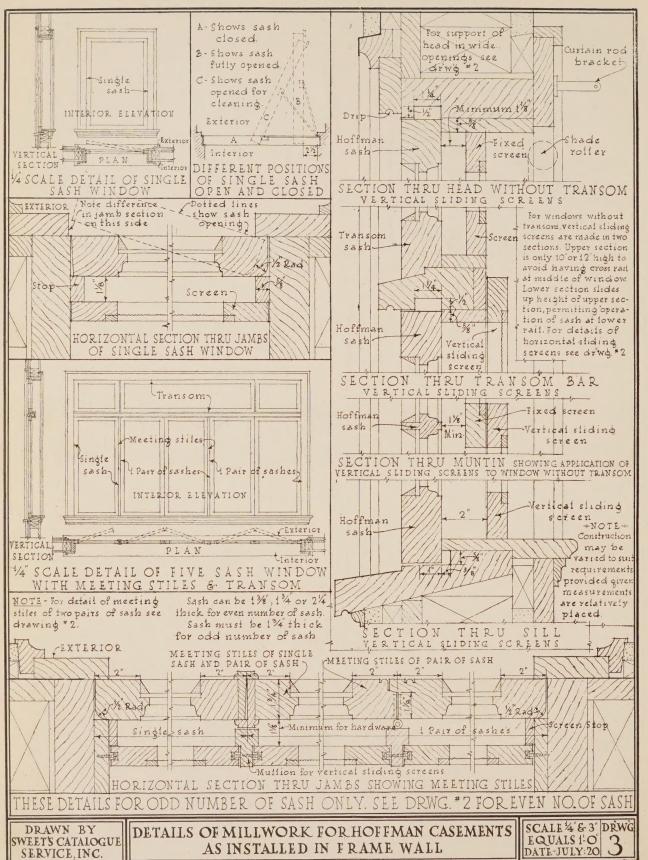
28 East Jackson Boulevard

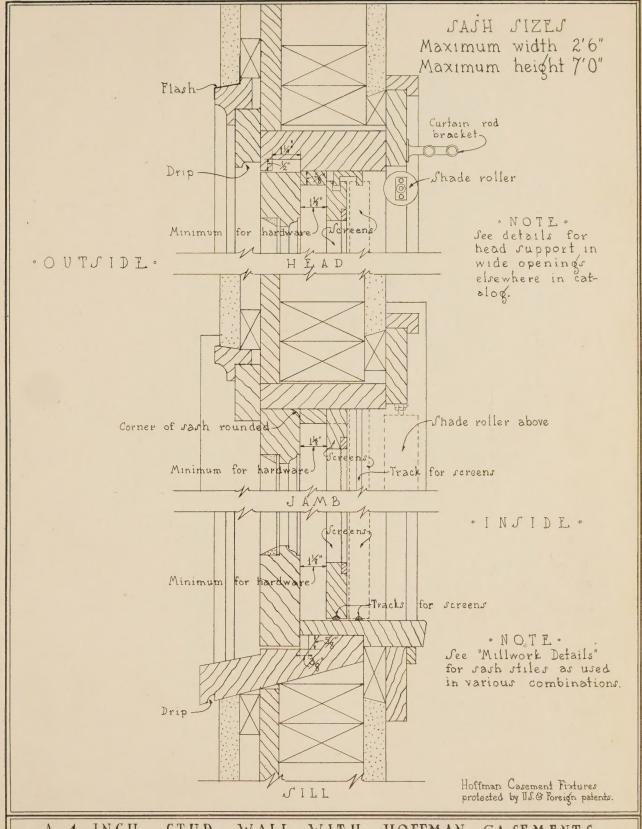
CHICAGO





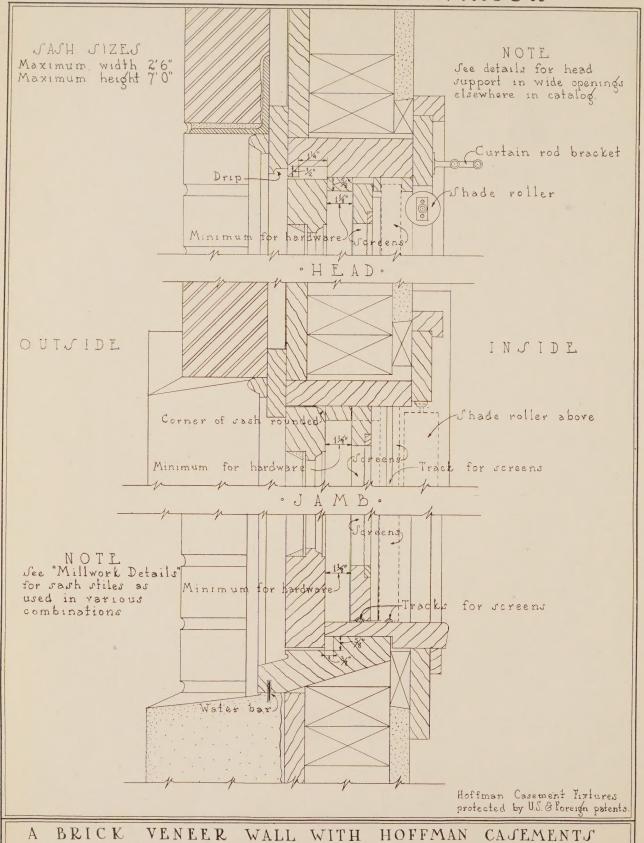


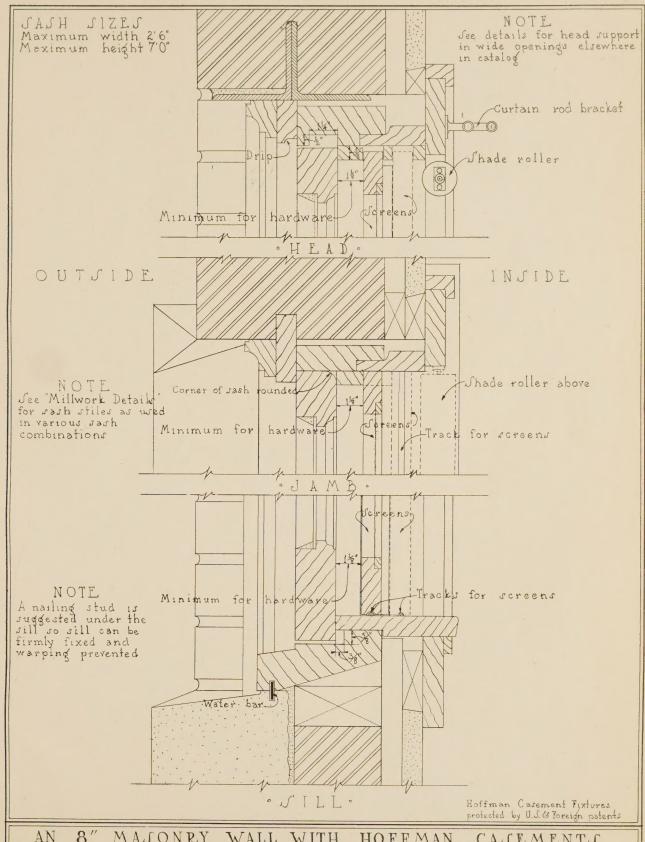




A 4 INCH STUD WALL WITH HOFFMAN CASEMENTS

SCALE 3" EQUALS 1'0" MAY-1-1922

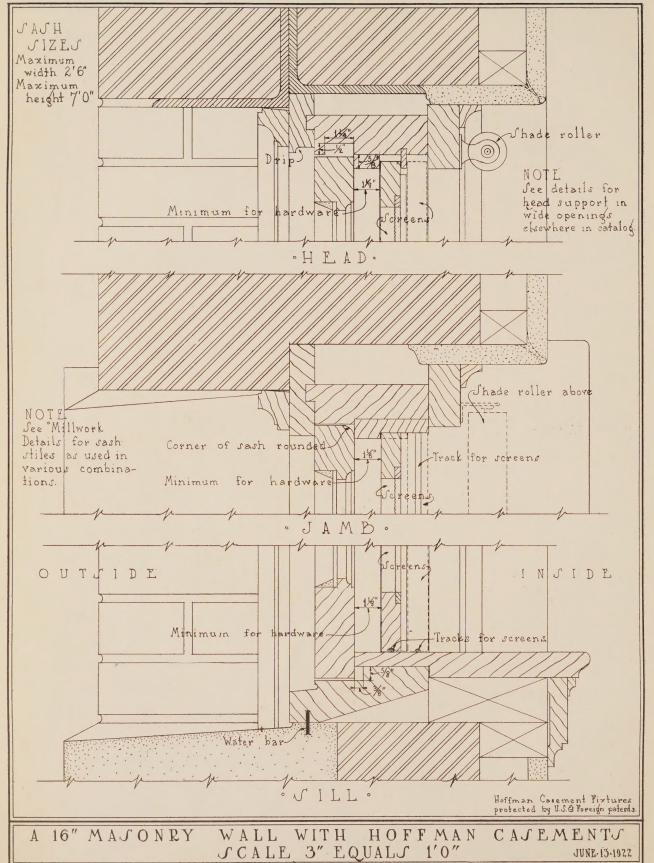




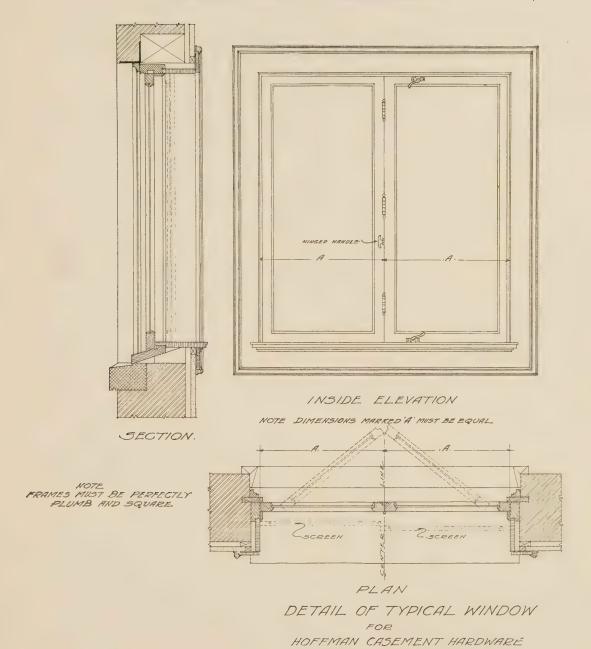
AN 8" MAJONRY WALL WITH HOFFMAN CAJEMENTS

SCALE 3" EQUALS 1'0"

MAY-23-1922



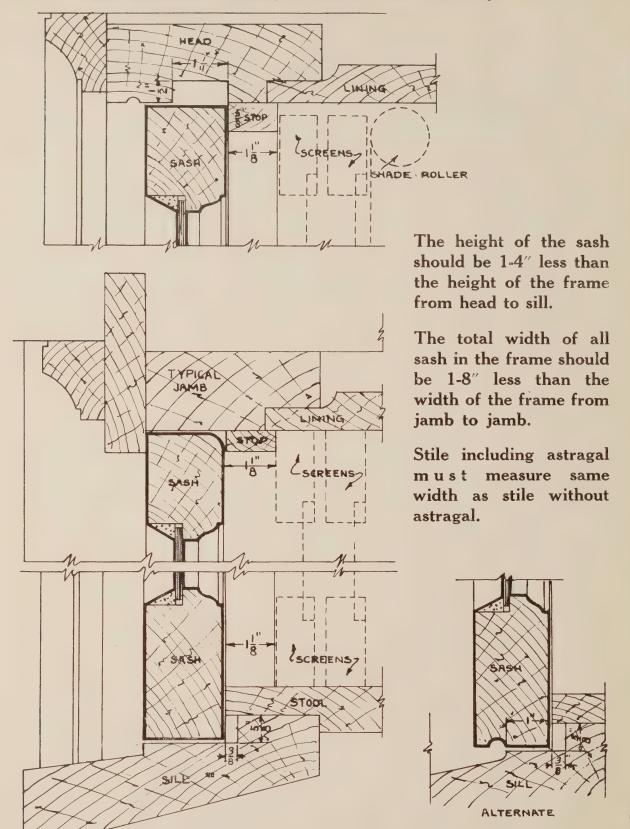
Typical
Frame and Sash Details
Showing
Various Sash Combinations



Andrew Hoffman Mfg. Co.

Hoffman Casement Window

28 East Jackson Boulevard CHICAGO, ILLINOIS



Hoffman Casement Window 6" SCALE MILLWORK DETAILS FOR HOFFMAN CASEMENTS - CENTER LINE OF PAIR SUGGESTED IN PLACE OF RABBET FOR 1%" SASH SASH IN EVEN NUMBERS MAY JAMB SASH SAMB BE - 13/4" - 13/4" OR 21/4" THICK. (TYPICAL) FOR ONE INCREASE OR DECREASE THICKNESS FROM OUTSIDE FACE - DO NOT HAVING ONE SASHONLY CHANGE INSIDE DETAIL. -CENTER LINE TWO SASH IN ONE OPENING TYPICAL JAMB BOTH SIDES SCREEN ONE SINGLE SASH ONLY - FOR ALL OTHER OPENINGS USE TYPICAL DETAILS SASH IN ODD NUMBERS MUST BE 13/4" THICK. CORNER OF SASH ROUNDED AT GENERAL NOTES CENTER LINE OF PAIR THESE DETAILS SHOW ALL SINGLE THREE SASH IN ONE OPENING SASH AT THE LEFT HAND SIDE OF THE RADIUS ON ALL ROUNDED TYPICAL JAMB BOTH SIDES OPENING AND TO SWING LEFT HAND: IF RIGHT HAND SASH ARE DESIREDAT THE RIGHT HAND SIDE OF THE OPENING (CONTINUE THIS UNIT FOR WIDE OPENINGS HAVING MORE THAN) 4 SASH IN EVEN NUMBERS-AS- 6-8-10-12-ETC. REVERSE THE DETAILS. CONSTRUCTION MAY BE CHANGED TO SUIT INDIVIDUAL REQUIREMENTS PROVIDING GIVEN MEASUREMENTS ARE RELATIVELY PLACED, SINGLE SASH WHETHER IN SINGLE OPENINGS OR IN MULTIPLE OPENINGS MUST BE IF SASH IN PAIRS ONLY ARE USED THEY MAY BE -13/6"-13/4" OR 21/4" THICK, THICREASE OR DECREASE THICKNESS FROM THE OUTSIDE FACE OF SASH AS SHOWN BY THESE DETAILS. CORNER OF SAGH ROUNDED AT CENTER LINE OF PAIR CENTER LINE OF PAIR FOUR SASH IN ONE OPENING TYPICAL JAMB BOTH SIDES CONTINUE THIS UNIT FOR WIDE OPENING HAVING MORE THAN 5 SASH IN ODD NUMBERS AS -7-9-11-13-ETC.

Andrew Hoffman Mfg. Co. C H 1 C A G O

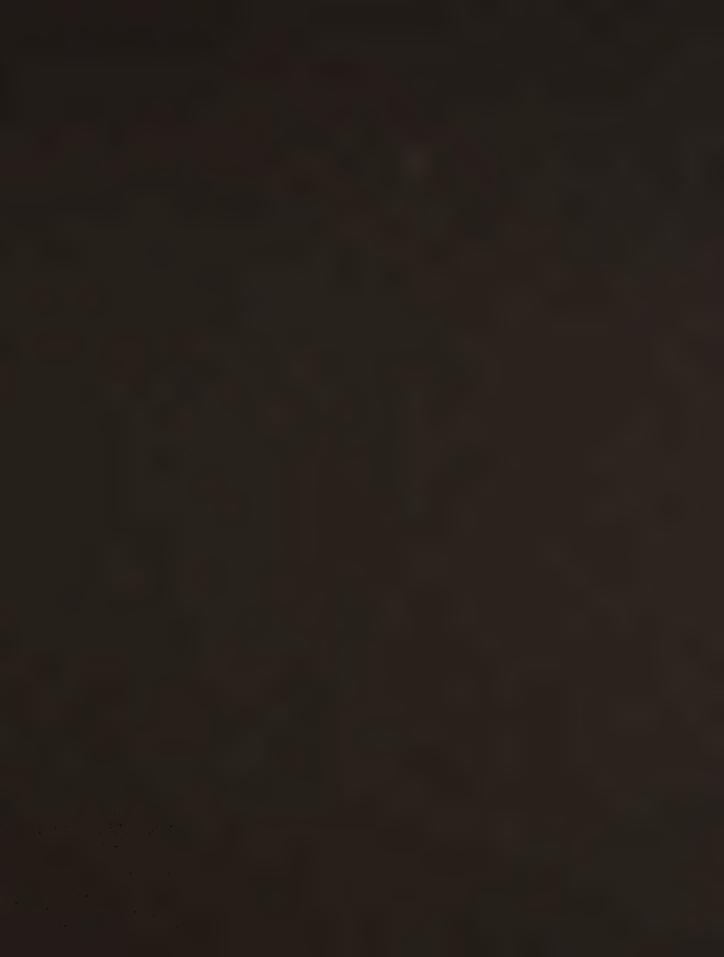
- CENTER LINE OF PAIR

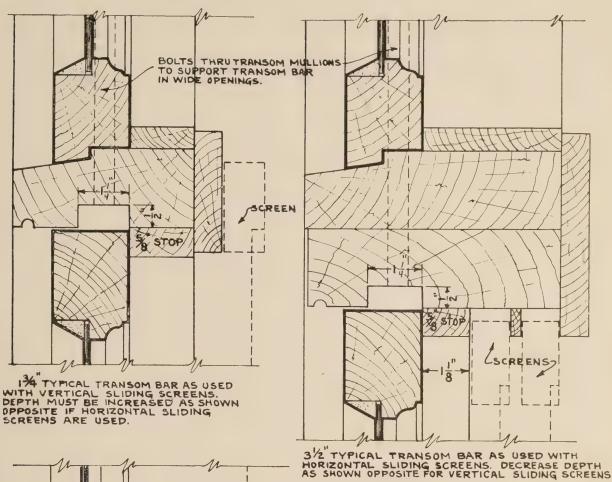
TYPICAL JAMB BOTH SIDES

CORNER OF SASH ROUNDED AT

CORNER OF SASH ROUNDED AT

CENTER LINE OF PAIR





SCREEN--ZR -ZR -ZR -ZR -ZR

TYPICAL MULLION AS USED WITH VERTICAL SLIDING SCREENS.

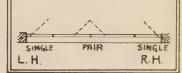
HORIZONTAL SLIDING SCREENS ARE USUALLY USED IN WIDE OPENINGS WITHOUT MULLIONS.

SEE SPECIAL SCREEN DETAILS FOR OPERATION OF SCREENS. EACH SASH SHOULD NOT EXCEED 30" x 84". —
THE MOST PRACTICAL SIZE IS 24" x 60"—

IF LARGE SASH ARE USED THEY SHOULD BE STIFFENED WITH MUNTINS SO THEY WILL NOT SAG OUT OF SQUARE.

NOTE THAT SASH IN ODD GROUPINGS MUST BE 1 3/4" THICK.

NOTE ALSO THAT SINGLE SASH ARE HANDED RIGHT AND LEFT. — DETERMINE HAND FROM DIAGRAM BELOW.



OFFMAN Casement Fixtures carry the sash suspended from the head, which permits ample clearance at the sill to prevent binding in case

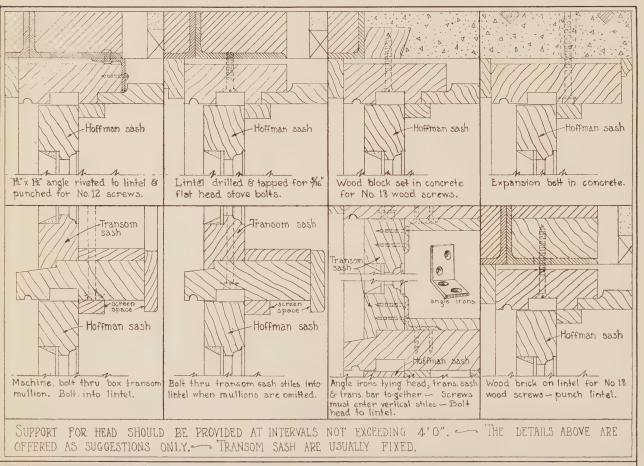
the sash swell in rainy weather.

Altho the sash is free from the sill and does not touch or rest upon it at any point, the windows are, nevertheless, water tight at this point, because, when closed, they bear against both the upstanding flange of the sill track and the edge of the stool, thus making a double contact with an open space between, past which water cannot blow in the most driving rain.

Inasmuch as the sash are entirely suspended from the head it is essential for proper operation that the head be firm and rigid, as otherwise, sagging will occur, causing the sash to drag upon the sill with consequent binding and difficult operation. Head support is recommended as necessary for all spans in excess of 4'0" and at centers not farther apart than 4'0".

On this page are shown several suggested methods for supporting the head in long spans both with and without transoms. The various details show means by which satisfactory results *have been* accomplished. Other and perhaps better methods may occur to you.

The purpose of these details is to impress upon you the necessity of some form of support for the head, when mullions are omitted, so when the hardware is installed it may have opportunity to function proporty.



HEAD SUPPORT IN WIDE OPENINGS FOR HOFFMAN CASEMENT WINDOW SCALE 3" EQUALS 1'0"

JUNE 1921

Details for Remodeling

D. H. and Common Casement Windows
to suit
Hoffman Casement Fixtures



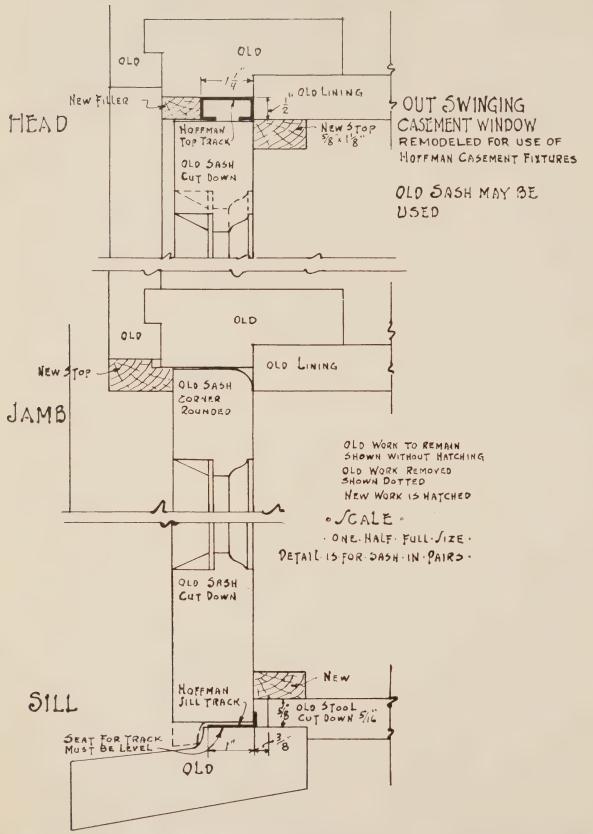
Jeffery & Schaefer, Architects, Los Angeles

Andrew Hoffman Mfg. Co.

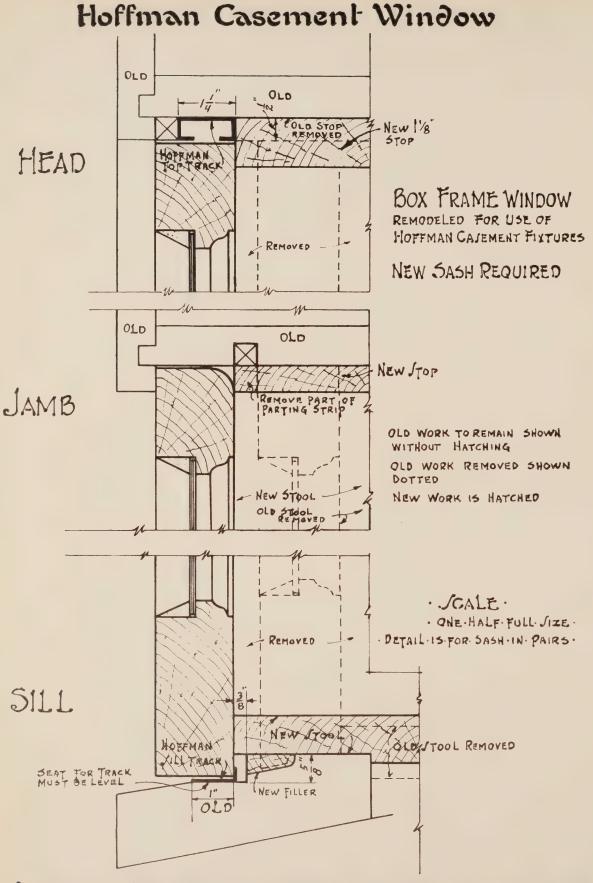
Hoffman Casement Window 28 East Jackson Boulevard

CHICAGO





Hoffman Casement Window OLD OLD TRIM 11/4" MOVED OLD MOVED HEAD · IN · SWINGING · HOFFMAN TOP TRACK x 18 STOP · CASEMENT · WINDOW · OLD SASH REMODELED FOR USE OF CUT DOWN HOFFMAN CASEMENT FIXTURES OLD SASH MAY BE USED . OLD. OLD TRIM MOVED OLD MOVED JAMB OLO SASH CUT DOWN OLD WORK TO REMAIN SHOWN WITHOUT HATCHING OLD WORK REMOVED OR MOVED SHOWN DOTTED NEW WORK IS HATCHED · SCALE -OLD SASH ONE HALF FULL SIZE . CUT DOWN DETAIL-15-FOR SASH IN PAIRS SILL NEW 3700 HOFFMAN SILL TRACKS SEAT FOR TRACK MUST BE LEVEL OLD APRON MOVED OLO STOOL REMOVED



Details and Description

Operation of

Single Sash



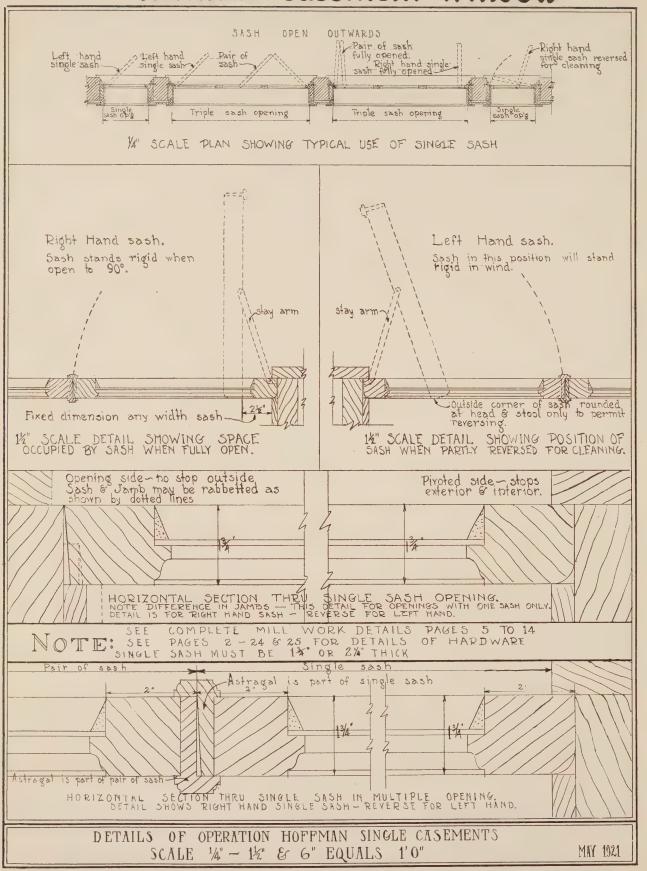
Hoffman Single Sash used thruout C. S. Barrows, Architect, Rochester, N. Y.

Andrew Hoffman Mfg. Co. Hoffman Casement Window

28 East Jackson Boulevard

CHICAGO







School—Jeffery & Schaefer, Architects Los Angeles

URPOSE: We recommend the use of sash in pairs as far as possible but recognize that odd sash grouping is sometimes desirable. For this reason and for use in narrow openings permitting the use of one sash only, single sash fixtures have been perfected.

Size of Sash: Single sash fixtures cannot be applied satisfactorily to 13/8" sash. The sash should be 13/4" thick or thicker. Single sash should not exceed 24" in width and if the window opening is wider than this a pair is recommended. Sashes up to a maximum width of 30" and a maximum height of 7'0", may, however, be used.

Location: When single sash are installed in multiple openings without mullions (as in groups of 3, 5, 7, etc.) they must be placed at the jamb. Regardless of the number of sash in the opening there is but one single sash, located at one of the jambs.

Operation: The single sash is permanently attached to one jamb and cannot be moved to any place in the opening as can the Hoffman Casements hung in pairs. It can however be partly reversed to permit convenient cleaning. It swings out from the jamb and presents practically the same appearance as an ordinary hinged sash.

Position: Regardless of the width of a single sash it stands just $2\frac{1}{2}$ " from the face of the jamb when open to 90 degrees. When open this far or farther it will stay rigid in the wind.

Mill Work: If the window is only wide enough to contain one single sash the outside stop must be omitted from one jamb to permit the sash to swing open. This jamb if desired may have a double rabbet with the sash rabbeted to fit as shown by the dotted lines on page 20.

When a single sash is used in a multiple opening in connection with pairs of sash, both jambs are constructed alike and have stops outside and inside. Complete details showing this are shown on pages 9 to 13.

The joint where a single sash and a pair meets is covered on the outside by an astragal attached to the single sash. An astragal may also be used to cover this joint on the inside but must be attached to the pair of sash.



Not Reversible:

Fixtures for single sash are made right and left hand and the architects'

drawings should indicate the swing of the sash so proper hardware may be supplied. The diagram illustrates the method of determining the hand.

Hardware: No hinges are required for single sash. With this exception and with the addition of stay arms (illustrated on page 2) the fixtures are identical with those used on sash in pairs. The stay arms stabilize and guide the sash during operation and hold it in position when open to 90 degrees or more. The stay arms are mortised into the top and bottom rails and are practically invisible when the window is closed.



Soldiers Hospital, N. H. D. V. S., W. A. O. Munsell, Supervising Archt., Los Angeles



L. C. Bouchard, Chicago, Architect

ments open to any desired position or any angle providing exact regulation of ventilation. By slightly opening the window a flue is created which draws out all impure air and automatically replaces it with fresh, without any direct draft.

Warping: The top hangers and bottom guides, together with three hinges hold the sash at all points where warping is likely to occur. If the sash warp from standing open a long time they are immediately straightened when closed by being forced at an angle into the pockets formed by the stops at the jambs.

Cleaning: Both sides of the glass are conveniently cleaned from inside the room without danger or inconvenience.

Weather Tight: It is impossible for water to blow past the sash in the most violent storm. These windows are more nearly air tight than any other and need no weatherstrips.

Low Cost: Because plank frames are used the mill work is cheaper than box frames and any carpenter can install the fixtures in much less time than any other window hardware.

No Operators Required: When Hoffman Casements are open to 45 degrees or more, each sash acts as a holding lever for the other and the wind will not affect them. When only slightly open a strong wind

would probably blow them shut but with not sufficient force to break the glass.

Maintenance. There are no complicated mechanisms, pulleys, cords, etc., and by the use of few and simple working parts, repair costs are eliminated.

No Mullions Necessary: In places where it is desirable, for view, ventilation or light, all mullions may be omitted. There is no limit to the width of the opening which may be used providing the head is properly supported.

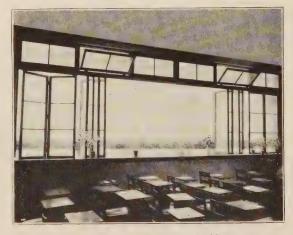
New or Old Work: Because the mill-work for Hoffman Casements is so nearly "standard" the fixtures may be installed on old windows with but few changes.

Shade Control: Hoffman Casements open outward and do not interfere with the use of shades and curtains of any type.

Freezing: The combination swinging and sliding motion of the windows as they are opened readily breaks away ice or snow.

Cannot Fall Out: Being hung from the top, Hoffman Casements can never fall out of the frame, regardless of the position in which they are placed.

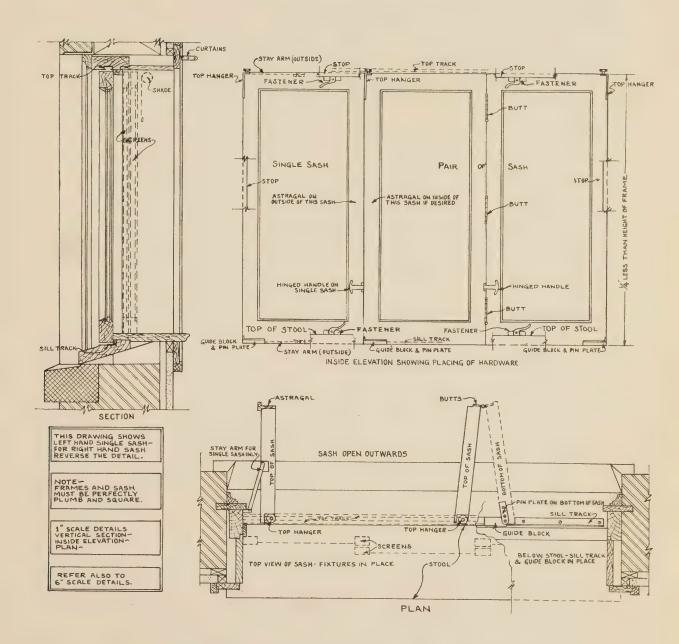
Securely Locked: Hoffman Casements are locked at both top and bottom by special fasteners which draw the sash perfectly tight. They cannot be opened by force from outside.



School—Train & Williams, Architects Los Angeles

Andrew Hoffman Mfg. Co. CHICAGO

Hardware Installation Details and Directions



Andrew Hoffman Mfg. Co.

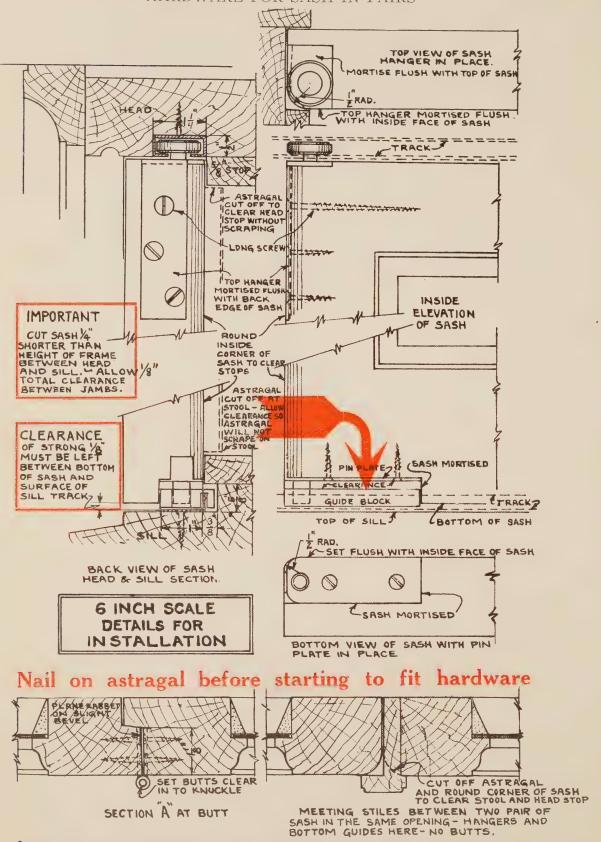
Hoffman Casement Window

28 East Jackson Boulevard

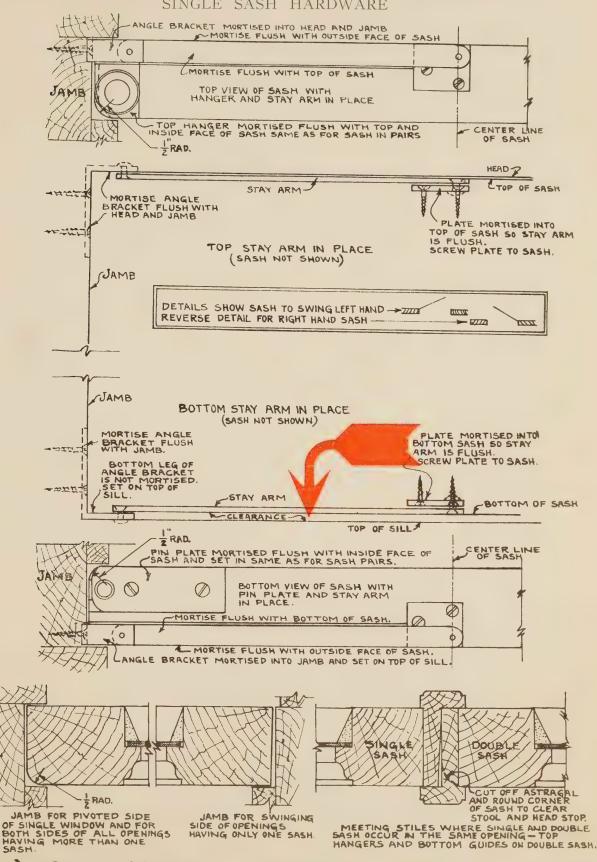
CHICAGO



HARDWARE FOR SASH IN PAIRS



SINGLE SASH HARDWARE



Andrew Hoffman Mfg. Co. C H I CA G

Page 25

INSTALL FIXTURES IN ORDER GIVEN HERE

that frame be absolutely level and square. If it is not the hardware will not operate properly. If span of head is more than 4' 0" it must be bolted to lintel so it can-

not sag with weight of sash.

2—Fit Sash: Do not attempt to fit sash unless they are perfectly dry. Sash must be fitted so they are 1/4" less in height than the height of the frame from head to sill. The total width of all sash should be 1/8" less than the frame width. Sash must be perfectly square and exactly equal in width. Where T astragals are used, the part which goes on the edge of the sash must be included in the measurement as part of the total sash width. All hardware is fastened on astragal—not under it—so nail on astragals before starting to put on hardware.

3—Apply Butts: Mortise butts in clear to

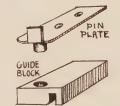
the knuckles—as far as they will go. Set butts close to glass line at top and bottom and the third butt midway between. Both sash of each pair must be exactly equal in width and the sash should line up as shown when folded together. Where T astragals are used figure them as part of the sash stile. Hinged Handle may also be applied now, wherever it will be most convenient for operating the windows when screens are in



BUTTO HERE

determined before placing handle.) 4-Pin Plates: Cut mortises at bottom

corners of sash at inside face. Make mortises the width and length of pin plate and the depth of pin plate and guide block together. Do not cut mortise as wide as guide block. This mortise when correctly made should be on the inside bottom corner and



should measure 1" in width, 1/2" deep and 31/8" long. Screw pin plate in place. Nail all T astragals in place before applying

hardware.

5—Top Hangers: Mortise top hangers so they are flush with back and top of sash and so lip on top of hanger is flush with inside face of sash. Drill screw holes but do not fasten hangers in place. Note that hangers

QUARE FRAME: It is essential are right and left hand. If there is a T astragal nail it on before fitting top hangers. The hangers are set on the T artragal—not under it.

6—Stay Arms for Single Sash: Mortise top and bottom of sash at outside face on side nearest jamb for stay arms and also cut mortises in head and jamb for stay arm brackets. Attach stay arms to sash. The stay arm is the only piece mortised at the outside face-every other piece is at the inside face.

Put 7—Top Track: the hangers in the track before screwing it in place. Insert one hanger for each sash and note they are in



pairs (right and left hand). Screw top track in place. See that screws set flush so hangers will pass easily without striking

screw heads. 8—Sill Track: Place guide blocks on sill track be-



fore screwing it down if stool is in place. Set sill track so that the upstanding flange will line up exactly with the edge of the stool and so the sash when closed will bear against both the track and the stool. See that all screws are flush so guide block will pass easily without catching on the heads.

9—Set Sash in Place: Fold sash and set in opening. Tip out sash so pins on pin plates will enter the hole in guide blocks. Draw sash in at the top and screw top hangers in place in the mortises previously made. Use the long 3" screw in the top hole. (If sash are heavy they may be set in place one at a time and the butt pins inserted afterwards.)

10-Single Sash: Now attach stay arms to jambs if single sash are used.

11—Fasteners: Apply fasteners to sash as shown about $3\frac{1}{2}$ " from hinged edge so that when the window is open the handle is not pinched between the sashes.

12—Follow drawings closely:—round all corners 1/2" where shown and allow plenty of clearance for astragals to pass easily over stool Too much clearance is and under head stop. better than not enough.

Note. Outside corners of single sash only should be beveled or rounded at head stop and stool so sash can be partly reversed for cleaning.

If these directions are followed the windows will operate easily. If the window binds at any point it will probably be due to not enough rounding at the corners so the sash binds at the head or stool. Examine these two points carefully and cut away a little more wood if necessary.

Special Notice: If span of head is more than 4' 0" it must be bolted or screwed (not nailed) to lintel so it cannot sag with weight of sash. Bolts must be not over 4" 0' apart.

O TOP

Details and Data

Concerning

Screens, Shades, Curtains, etc.



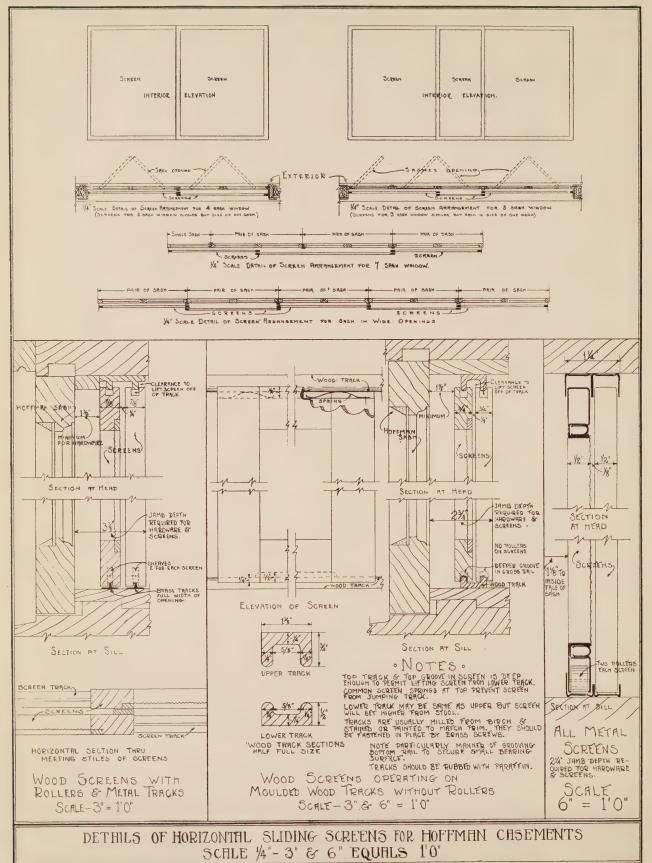
R. C. Buckley, Architect, Minneapolis

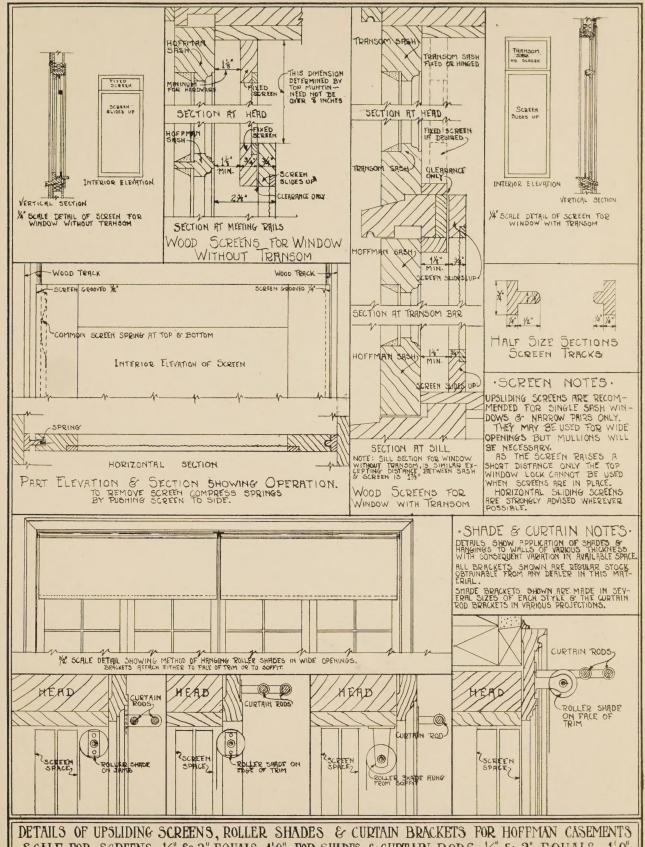
Andrew Hoffman Mfg. Co.

Hoffman Casement Window

28 East Jackson Boulevard







SCALE FOR SCREENS 4" & 3" EQUALS 1'0"-FOR SHADES & CURTAIN RODS 1/2" & 3" EQUALS 1'0"

Andrew Hoffman Mfg. Co. C H 1 C A G

Page 29

OCATION: Hoffman Casements open outwards, therefore the screens must be placed inside of

the windows. Inside screens installed according to our details are conveniently operated, easily removed for storage and easily replaced. The details shown are suggestions only and screens of other types may be installed providing a minimum of 11/8" is left between the sash and the screen for the accommodation of the window hardware.

As it is necessary to open the screen in order to operate the windows, a screen permitting convenient operation should be specified. The screens we detail have been found to be very convenient in operation and do not interfere in any way with the hanging of shades or curtains.

Other Types: In places where curtains are not necessary, screens may be hinged but are not generally recommended because of interference with shades and curtains.

Rolling screens, operating similar to roller shades, may be had, which are practical and convenient for use with Hoffman Casements, are always ready for service and need not be removed for winter storage as they roll up completely out of sight. We will be glad to have special information sent to those desiring to use them.

Economical: Inside screens are more economical than outside, because they are not directly exposed to weather and consequently last indefinitely without re-wiring or yearly painting. They are also cleaner than outside screens.

Storm Sash: In extremely cold climates it may be found desirable to install storm sash and if so, the storm windows may be made interchangeable with the screens, running on the same tracks and operated in the same manner. Storm sash installed in this manner permit the opening of the window on mild days and also permit the cleaning of windows.

Transoms: Where transoms are used, they are usually left unscreened, as they are not necessary for ventilation and are opened only for cleaning.

Shades, etc.: Shades and curtains are installed in the same manner as with windows of ordinary type. They should be placed inside of the screen so that the screen is between the curtains and the window sash. The details shown suggest several methods for hanging curtains and shades, depending upon the amount of jamb space available. Venetian shades or any of the ordinary porch shades may be installed.

Awnings: Outside awnings may also be used if they are set high enough to clear the point of sash when the awning is down and the window open. If transoms are used the awning will usually clear the sash when set at the top of the transom.

Note: We do not usually sell screens or screen hardware, but can supply rollers and metal tracks for sliding screens, if not readily obtainable locally.

